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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,877	07/20/2005	Tsuyoshi Kanda	275548US3PCT	8388
22850	7590	09/04/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			CRUZ, MAGDA	
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			2851	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/542,877	Applicant(s) KANDA ET AL.	
	Examiner Magda Cruz	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>09/27/2005 and 11/13/2006</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS 02/07/07 & 04/17/07.</u> |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “filled layer filled between the first lens layer and the second lens layer” (see claim 11), and “a filled layer having a different refractive index from the first lens layer between the first lens layer and the second lens layer” (see claim 21) must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Information Disclosure Statement

3. The information disclosure statement filed 09/27/2005 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the reference JP 52-375 has been filed without a translation. The document JP 52-375 has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Specification

4. The abstract of the disclosure is objected to because the numerals should be written in parenthesis or deleted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Regarding claims 1, 11 and 21, the limitation “a self-aligned ambient light absorbing layer placed in a non-passing position of light” renders the claim to be indefinite. The examiner believes that the applicant failed to define what is a “self-aligned ambient light absorbing layer” and what is a “non-passing position of light”. The applicant is respectfully requested to clarify said phrase.

b. Regarding claims 10, 12 and 16, the limitation “a self-aligned ambient light absorbing layer placed on an output surface of the second lens layer and in a non-passing position of light” renders the claim to be indefinite. The examiner believes that the applicant failed to define what is a “self-aligned ambient light absorbing layer” and what is a “non-passing position of light”. The applicant is respectfully requested to clarify said phrase.

- c. Claims 2-9, 13-15 and 17-20 fall with parent claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5, 8-12, 16-17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto.

Goto (US Patent Number 5,880,887) discloses:

- Regarding claims 1 and 10-11, a first lens array (Figure 12, element 10) formed in an input surface; a second lens array (Figure 12, element 32) formed closer to a light output side than the first lens array (Figure 12, element 10), substantially orthogonal to the first lens array (clearly illustrated in Figure 12), and constituting an input side and an output side of a lens boundary with light transmitting material having different refractive index from each other (column 11, lines 57-58); and a self-aligned ambient light absorbing layer (Figure 12, element 34; column 11, lines 47-49) placed in a non-passing position of light having passed through the first lens array (Figure 12, element 10) and the second lens array (Figure 12, element 32), wherein a part from the first lens array to the self-aligned ambient light absorbing layer (element 16) is a solid

structure with light transmitting material (column 11, lines 11-12 and 22-24).

- Regarding claim 5, a lens pitch of the first lens array is two to ten times a lens pitch of the second lens array (column 3, lines 34-36).
- Regarding claim 8, a Fresnel lens sheet (Figure 12, element 20) narrowing down light output from a rear projection projector (i.e. rear projection TV; column 12, lines 11-12) into a certain angle range; a lenticular lens sheet (Figure 12, element 10); and a front plate (Figure 12, element 35) placed in an output surface side of the lenticular lens sheet (Figure 12, element 32).
- Regarding claim 9, a rear projection projector generating and outputting video light (i.e. rear projection TV; column 12, lines 11-12); and a rear projection screen (i.e. lenticular lens sheets) inputting the video light output from the rear projection projector (column 12, lines 13-15).
- Regarding claims 12, 16-17 and 21, a method comprising a step of forming the second lens layer and a step of forming the first lens layer on the second lens layer after forming the second lens layer (column 11, lines 27-36).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2851

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto in view of Watanabe et al.

Goto (US Patent Number 5,880,887) teaches the salient features of the present invention as explained above, except (regarding claim 2) a light transmittance front plate is laminated in an output side of the self-aligned ambient light absorbing layer; (regarding claim 6) the self-aligned ambient light absorbing layer is lattice-shaped; (regarding claim 7) the self-aligned ambient light absorbing layer is stripe-shaped.

Watanabe et al. (US Patent Number 5,477,380) disclose:

- Regarding claim 2, a light transmittance front plate is laminated in an output side of the self-aligned ambient light absorbing layer (i.e. beam absorbing layer; column 10, lines 61-62).
- Regarding claim 6, the self-aligned ambient light absorbing layer (i.e. beam absorbing layer) is lattice-shaped (clearly illustrated in Figure 16).
- Regarding claim 7, the self-aligned ambient light absorbing layer (i.e. beam absorbing layer) is stripe-shaped (clearly illustrated in Figure 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the light absorbing layer disclosed by Watanabe et al. in combination with Goto's invention for the purpose of providing good pictures on a projection screen (Watanabe et al., column 3, lines 20-21).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Glenn Jr. (US Patent Number 3,523,717) discloses a composite back projection screen.

Oda et al. (US Patent Number 6,865,834 B2) teach a display apparatus having a lens sheet with a plurality of unit columnar lenses.

Kumagai et al. (US Pub. No. 2005/0117212 A1) show a rear projection screen.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magda Cruz whose telephone number is (571) 272-2114. The examiner can normally be reached on Monday through Thursday 8:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Magda Cruz
Patent Examiner

August 27, 2007



DIANE I. LEE
SUPERVISORY PATENT EXAMINER